

REMARKS

The Office Action mailed September 25, 2003, has been received and reviewed. Claims 1 through 48 are currently pending in the application, of which claims 38 through 48 are currently under examination. Claims 1 through 37 are withdrawn from consideration as being drawn to a non-elected invention and have been canceled. Applicants herein acknowledge the restriction requirement in the above-referenced application, and affirm the election to prosecute the claims of Group II, claims 38 through 48, without further traverse. Claims 38 through 48 stand rejected. Applicants have amended claims 38, 40, 42, 43, 45, and 46, and respectfully request reconsideration of the application as amended herein. It is noted that all amended claims have deleted the term "said" and replaced it with "the" for enhanced clarity and not to alter the scope thereof. Claims 49 through 52 have been added.

Supplemental Information Disclosure Statement

Please note that a Supplemental Information Disclosure Statement was filed herein on October 23, 2001, and that page 1 of the PTO-1449 was returned with the outstanding Office Action, however, page 2 of the PTO-1449 was not returned. Applicants respectfully request that the information cited on the PTO-1449 be made of record herein. It is respectfully requested that an initialed copy of page 2 of the PTO-1449 evidencing consideration of the cited references be returned to the undersigned attorney. Enclosed herewith for the Examiner's convenience is a copy of page 2 of the PTO-1449 in question as filed.

Applicants have also enclosed with the present Office Action Response an additional Supplemental Information Disclosure Statement.

35 U.S.C. § 102(b) Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 6,514,566 to Mann et al.

Claims 38 through 48 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,514,566 to Mann et al. (hereinafter "the Mann Patent"). Applicants respectfully traverse this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found,

either expressly or inherently described, in a single prior art reference. M.P.E.P. § 2131 citing *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. M.P.E.P. § 2131 citing *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants have amended independent claims 38 and 42 to more precisely define the composite medium of the present invention. Currently amended claims 38 and 42 are recited below in clean form for clarity.

38. (Currently Amended) A column assembly for facilitating substantial removal of at least one constituent of a fluid stream passing through the column assembly, the column assembly comprising:

- a column housing defining a chamber and having a column housing inlet and outlet connections in fluid communication with the chamber; and

- a composite medium disposed in the chamber, wherein the composite medium comprises a plurality of discrete particles arranged to define a plurality of openings therebetween and each of the plurality of particles comprises:

- a porous matrix material substantially comprising a polymer; and

- at least one active component supported by the porous matrix material, the at least one active component being selected from the group consisting of: crystalline silicotitanate, carbon, and carbamoyl phosphine oxides.

42. (Currently Amended) An ion processing system suitable for facilitating removal of at least one constituent of a fluid stream passing through the ion processing system, the ion processing system comprising:

- a column assembly including:

- a column housing defining a chamber and having column housing inlet and outlet connections in fluid communication with the chamber; and

- a composite medium disposed in the chamber, wherein the composite medium comprises a plurality of discrete particles arranged to define a plurality of openings therebetween and each of the plurality of discrete particles comprises:

- a porous matrix material substantially comprising polyacrylonitrile;

- and

- at least one organic active component supported by the porous matrix material, the at least one organic active component being selected from the group consisting of: crystalline silicotitanate, carbon, and carbamoyl phosphine oxides; and

- column inlet and column outlet piping in fluid communication with the column assembly.

The Mann Patent discloses “a porous substrate, preferably comprising fibrous glass, impregnated with a composite medium. The composite medium, in turn, comprises an active component supported by a porous matrix material. The matrix material, in some embodiments, is substantially comprised of an organic polymer, such as polyacrylonitrile (PAN). One or more active components, such as crystalline silicotitanate (CST), carbon, or octyl (phenyl) N,N-diisobutylcarbamoymethylphosphine oxide (CMPO) for example, are dispersed throughout the matrix material.” (Column 5, lines 1-11).

The Mann Patent fails to disclose, either expressly or inherently, the elements in currently amended independent claims 38 and 42 reciting “the composite medium comprises a plurality of discrete particles arranged to define a plurality of openings therebetween.” In contrast, the Mann Patent discloses a porous substrate having the pores impregnated with a composite medium. (Column 5, lines 1-3). Therefore, the anticipation rejection of currently amended independent claims 38 and 42 should be withdrawn because the Mann Patent fails to disclose all of the recited elements. Furthermore, the Mann Patent also fails to anticipate dependent claims 39-41 and 43-49 because they depend from novel and nonobvious independent claims 38 and 42.

Disqualification of the Mann Patent as Prior Art Under 35 U.S.C. § 102(e)

As stated above, the Mann Patent fails to anticipate amended independent claims 38 and 42, and claims depending therefrom. Furthermore, the Mann Patent is disqualified as prior art for use in a rejection under 35 U.S.C. § 103(a) via 35 U.S.C. § 102(e). The present application and the Mann Patent were, at the time the invention of the present application was made, owned by or subject to an obligation of assignment to Lockheed Martin Idaho Technologies Company. Lockheed Martin Idaho Technologies Company is the predecessor in interest to Bechtel BWXT Idaho, LLC the current assignee of both the Mann Patent and the present application. Therefore, the Mann Patent is disqualified as prior art for use in a rejection under 35 U.S.C. § 103(a) via 35 U.S.C. § 102(e). See, M.P.E.P. § 706.02(l)(1) and 706.02(l)(2).

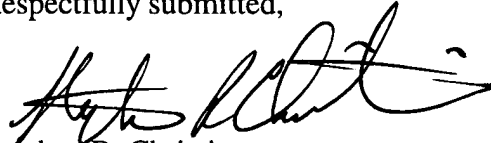
ENTRY OF AMENDMENTS

The amendments to claims 38, 40, 42, 43, 45, and 46, and new claims 49 through 52 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application.

CONCLUSION

Claims 38 through 48 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Stephen R. Christian', is written over the typed name.

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